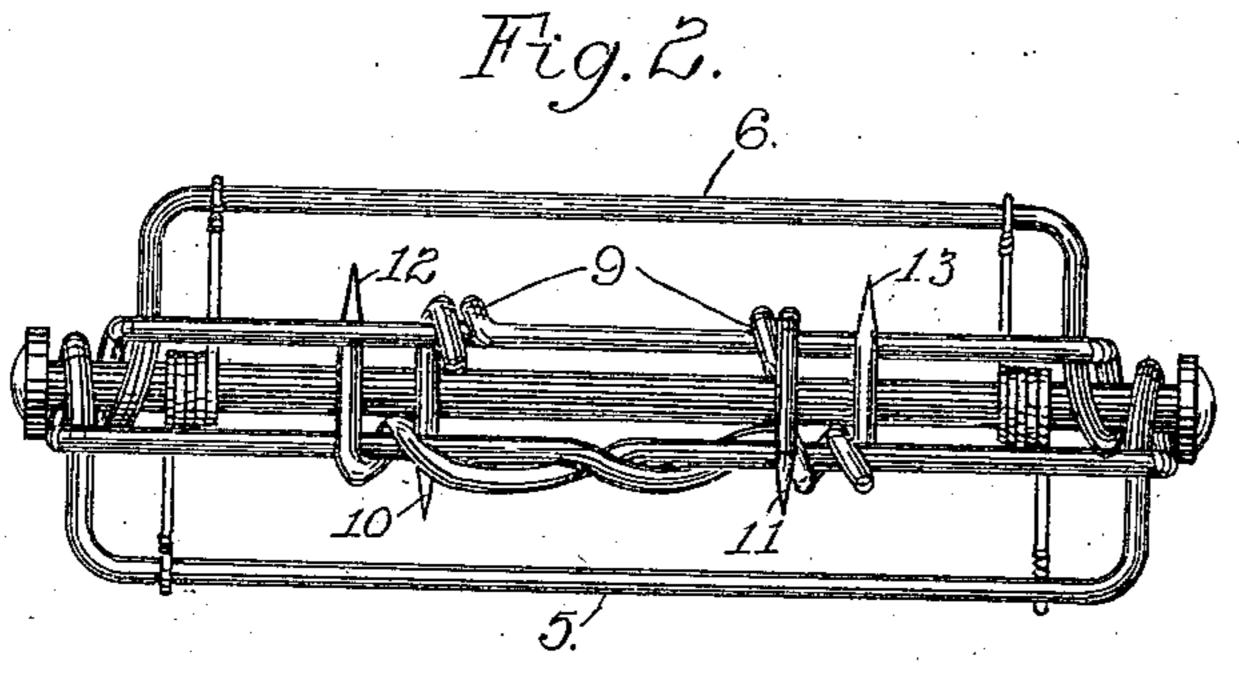
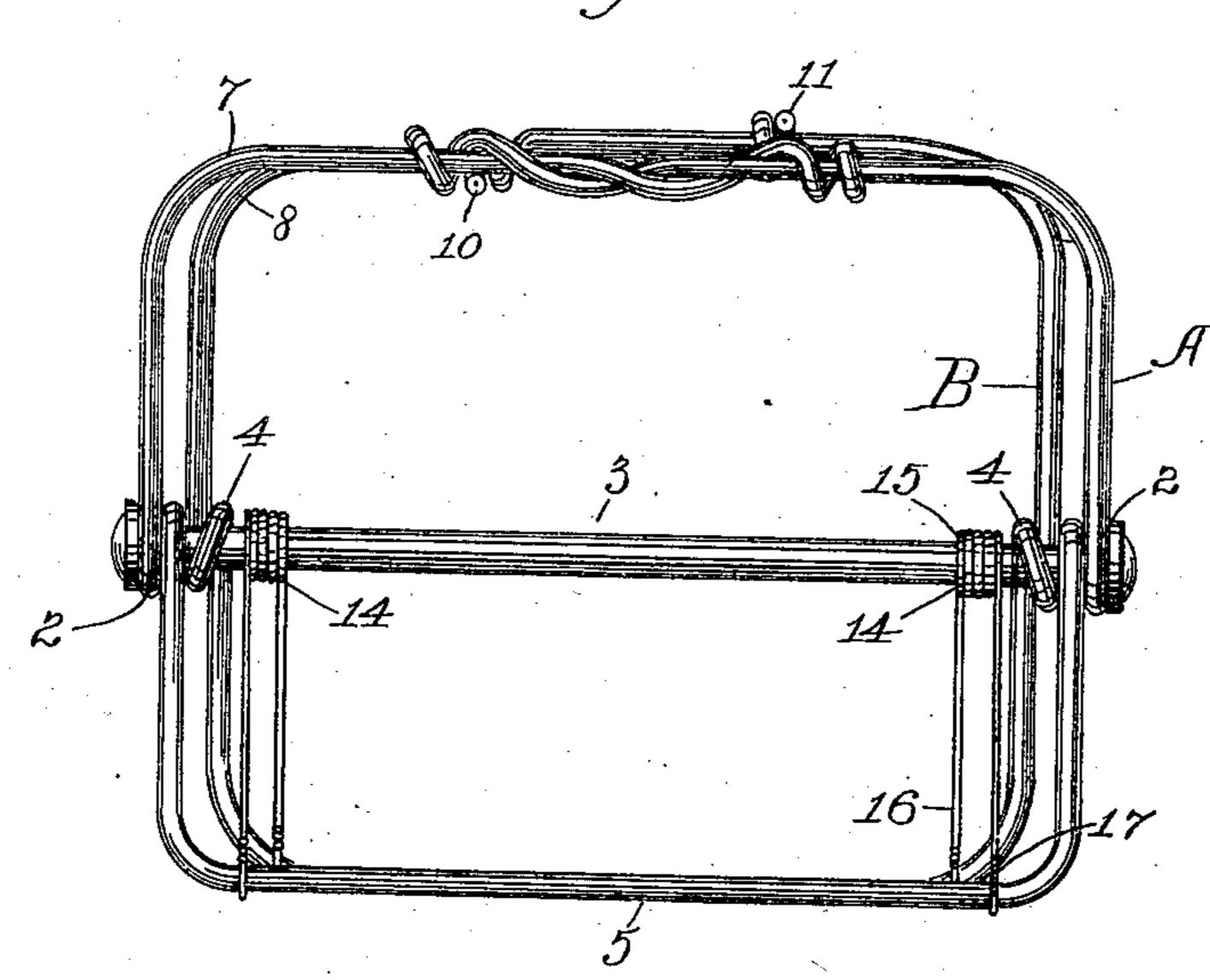
(No Model.)

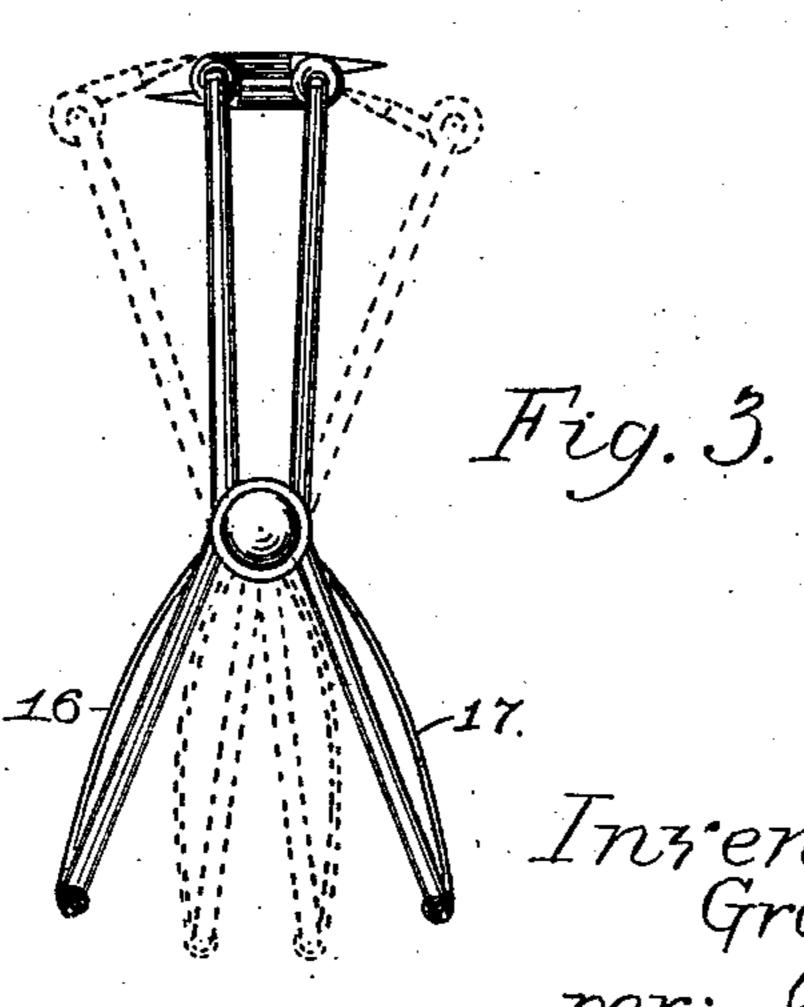
G. SMITH. FISH CLAMP.

No. 549,333.

Patented Nov. 5, 1895.







Witnesses:

Inventor: Granger Smith per: Mermin Attorney.

## United States Patent Office.

GRANGER SMITH, OF CHICAGO, ILLINOIS.

SPECIFICATION forming part of Letters Patent No. 549,333, dated November 5, 1895.

Application filed August 13, 1894. Serial No. 520,160. (No model.)

To all whom it may concern:

Be it known that I, Granger Smith, of Chicago, Cook county, Illinois, have invented certain Improvements in Fish-Clamps, of 5 which the following is a specification.

My invention relates to improvements in spring-clamps, its object being to provide a convenient form of hand-clamp or grapple for the holding of fish and game during the 10 operation of cleaning or for the dislodgment of hooks and the like.

To this end my invention consists in providing a pair of double bail-shaped wire bows centrally hinged or pivoted together, one 15 bail of each member serving as the handle and the other as the jaw. The jaw part is made by the ends of the wire interlocked or twisted together to form the cross-bar, their points serving as teeth and projecting toward 20 and interlocking with the opposite jaw and alternating with its teeth. Suitable spring attachments serve to normally close the jaws.

My invention further consists in the construction and combination hereinafter par-

25 ticularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of my improved clamp, showing the relaative positioning of the clamp members and 30 actuating-springs. Fig. 2 is an end elevation of the same, showing the manner in which the teeth alternate and interlock; and Fig. 3 is a side elevation of the same, the normal position of the parts being shown in full lines 35 and the open position by dotted lines.

In the drawings, the two clamp members A and B are similarly formed, but for convenience the clamp A is made somewhat wider than B, so that its journal eyes or 40 twists 2 can fit upon the common axis or pivot 3 outside of the corresponding eyes or twists 4 of the clamping member B, these eyes or turns 2 and 4 serving as bearings for the axis or pivot. The bails 5 and 6 of the clamp 45 members A and B serve as the handles by which the tool is grasped and operated. The ends of the wires which form the clamp members are bent together to form the cross-bars of the bails 7 and 8, respectively, the tips of [

the wires being pointed, as shown in Figs. 2 50 and 3, and each being twisted around the other end, the points projecting at right angles therewith and with the plane of the member. The ends of the member A are simply twisted together, as shown best in Figs. 1 and 55 2, with the points broadly interspaced, while the points of the ends of the member B are carried alongside and past each other in parallel position, and then each end given a closed spiral twist 9 around the other, the 60 points 10 and 11 being more narrowly spaced and standing between the points 12 and 13 of the other member, or the points on one may be alternate with those of the other. In each case, as will be seen, one of the points 65 extends down inside of the bail and the other on the outside, and the points of each clamp member project toward and interlock with the other member, so as to firmly engage and hold an object interposed between the jaws. 70 In order to hold the clamp normally closed any suitable form of closing-spring may be employed, but I illustrate a simple form, shown best in Fig. 1. This consists of two expanding spiral springs 14, the twist 15 of 75 which surround the pivot 3, and the ends 16 and 17 of which are respectively attached to the bails of the clamp members A and B, or the spring can be formed by the ends of the wire serving as axis.

In use the handles are compressed together, as indicated by dotted lines in Fig. 3, so as to throw the jaws open a sufficient distance to receive between them the head or body of the fish or other object, the jaws being then 85 allowed to close together under the tension of the springs for the purpose, in case it be a fish, of scaling, skimming, cleaning, or dis-

lodging hooks and the like.

I claim— 1. In a clamp of the class described, the combination with the common axis, of the double bail shaped members thereon, one bail of each member serving as a handle and the other serving as a jaw and formed by the 95 intertwisting of the ends of the wire, the ends of the wire being sharpened and projecting toward the other clamp member and

serving as teeth, and the springs twisted around said axis and normally holding the

clamp jaws in closed position.

2. In a clamp of the class described, the 5 jaw formed by the meeting ends of the wire forming the same carried past each other in parallel position, then each being given a T. D. MERWIN, spiral twist around the other with its tip sharp- H. S. JOHNSON.

ened and projecting at right angles with the jaw and on opposite sides thereof.

In testimony whereof I affix my signature in presence of two witnesses.

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GRANGER SMITH.

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Witnesses: